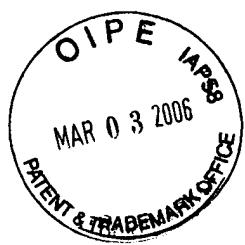AF
JBW

CERTIFICATE OF MAILING 37 C.F.R 1.8
I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date below:
2-27-06 _____ *Nancy Nolen* _____ Date   Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

RONALD BJORKLUND

RAJ BRIDGELALL

WILLIAM DEROUCHEY

CHARLES FUREDY

RICHARD WATSON

Serial No.: 09/483,167

Filed: JANUARY 14, 2000

For: MULTI-TIER WIRELESS
COMMUNICATIONS ARCHITECTURE,
APPLICATIONS AND METHODS

Group Art Unit: 2635

Examiner: C. I. YANG

Conf. No.: 8032

Atty. Dkt.: 6000.000300/0838

CUSTOMER NO.: 23720

REPLY BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants hereby submit this Reply Brief to the Board of Patent Appeals and Interferences in response to the Examiner's Answer mailed December 27, 2005. The statutory response date is February 27, 2006. This Reply Brief is being filed on February 27, 2006, therefore, it is timely filed.

No fee is believed due for the filing of this Reply Brief. However, should any additional fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed material, or should an overpayment be included herein, **the Commissioner is authorized to deduct or**

credit said fees from or to Williams, Morgan & Amerson, P.C. Deposit Account No. 50-0786/6000.000300.

ARGUMENT

The Applicants file this Reply Brief to address a specific argument raised in the Examiner's Answer. For reasons presented below, the Examiner's argument is flawed. The Applicants believe that this flaw so fundamental that it alone undermines the Examiner's entire case and is sufficient to allow the Board to resolve this matter in Applicants' favor with respect to all of the claims.

In section entitled "Response to Argument" of the Answer, the Examiner purports to address the arguments raised in the Applicants' Opening Brief. At issue is the last claimed feature of claim 34, which recites "wherein the host is adapted to control the remote unit through the first-tier base station, the first second-tier base station, and the second second-tier base station".[1]

With respect to this claimed feature, in rebutting the Applicants' argument, Examiner states that "Mahany teaches a host computer that controls a remote unit via first-tier base stations, whereas del Castillo teaches a host computer that control a remote unit via a first-tier base station, a first second-tier base station, and a second second-tier base station." *See* Examiner's Answer, page 11. This statement by the Examiner is significant because it squarely reinforces the issue that is before the Board -- whether del Castillo, in fact, teaches the last claimed feature of claim 34.

The Examiner's statement in the "Response to Argument" makes two points, each of which is addressed separately below. First, the Examiner notes that "Mahany teaches a host computer that controls a remote unit via first-tier base stations." *See* Examiner's Answer, page 11. Here, although not apparent from the Examiner's cleverly phrased statement, the Examiner

is admitting to the Board that Mahany does not teach the last feature of claim 34. This is because claim 34 calls for more than controlling the remote unit via the first-tier base station; rather, it specifies that the host computer controls the remote unit through first-tier base station as well <u>as</u> <u>the second-tier base stations.</u> Because the Examiner admits that Mahany does not teach this last claimed feature, the focus thus shifts to whether it is taught by the other reference, namely del Castillo. This is leads to the second point made in the Examiner's statement. The Examiner argues that the feature missing from Mahany is taught by del Castillo because "del Castillo teaches a host computer that control a remote unit via a first-tier base station, a first second-tier base station, and a second second-tier base station." *See* Examiner's Answer, page 11.

Thus, the specific issue before the Board is whether del Castillo teaches the last claimed feature, as the Examiner contends. If it does not, the Examiner's entire argument falls, and <u>all of</u> <u>the claims</u> are allowable over the cited art. The Applicants explain below that, notwithstanding the Examiner's contention, del Castillo does not, in fact, teach the last feature of claim 34.

As noted, the Examiner contends that del Castillo teaches the feature of "a host computer that control a remote unit via a first-tier base station, a first second-tier base station, and a second second-tier base station." But for del Castillo to teach this claimed feature, it must first teach or disclose the various components recited in that claim element – such as a "first-tier base station," "second-tier base stations," and the "remote unit." After all, if del Castillo does not teach these components, it is axiomatic that it also cannot teach a host computer controlling a remote unit through those components. For example, if del Castillo does not teach a second-tier base station, then it naturally cannot teach a host computer that can control a remote unit through that second-tier base station.

---

[1] Other claims include a similar limitation, but for ease of discussion, the discussion here focuses on claim 34 specifically, although the arguments presented herein are also applicable to the other rejected claims.

In the instant case, del Castillo at least fails to teach the first second-tier base station (recalling that the claims call for two second-tier base stations – a first and a second second-tier base station). To understand how the first second-tier base station is missing from del Castillo, it is first helpful to understand the interplay between the first-tier base station and the two second-tier base stations that are recited in claim 34. One need not look any further than the language of claim 34 itself to understand the relationship between these base stations. For example, claim 34 specifies that the first-tier base station and the first second-tier base station communicate using the first communications protocol, while the two (both first and second) second-tier base stations communicate with each other using a second communications protocol that is different from the first communications protocol. In summary, claim 34 informs the reader that the "first second-tier base station" is one that (1) communicates with the first-tier base station with one protocol and (2) communicates with the second second-tier base station using a different protocol.

To meet the last claimed feature of claim 34, the Examiner must thus show that del Castillo teaches a "first second-tier base station" that communicates using two different protocols. However, the Examiner has already admitted that del Castillo does not teach the "first second-tier base station." In particular, the Examiner has acknowledged that, in *del Castillo*, all AMSs 12 (which the Examiner asserts corresponds to "second-tier base stations") communicate with the HTU 18 (which the Examiner asserts corresponds to the "first-tier base station") using the same mechanism (*i.e.,* frequency shift key shift keying (FSK) RF modem signals). *See* Office Action, 6-17-04, page 5 (stating that "Del Castillo discloses that HTU 18 and all AMSs 12 communicate using frequency shift key shift keying (FSK)). Thus, there are no "first second-tier base stations" (ASMs 12) that use two different protocols, one for communication with the "first-tier base station" (HTU 18) and another for the "second second-tier base station" (ASMs 12.) To
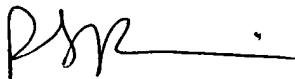
the contrary, as conceded by the Examiner in the 6-17-04 Office Action, all AMSs 12, in fact, employ the same communication protocol.

Accordingly, del Castillo at least does not teach a "first second-tier base station." It therefore follows that it also cannot teach a host computer that can control a "remote unit" through the first second-tier base station. For this reason alone, the Examiner's flawed position should be rejected and the claims should be allowed.

Respectfully submitted,

WILLIAMS, MORGAN & AMERSON, P.C.
CUSTOMER NO. 23720

Date: _____2/27/06_____   By: _____

Ruben S. Bains, Reg. No. 46,532
10333 Richmond, Suite 1100
Houston, Texas 77042
(713) 934-4064
(713) 934-7011 (facsimile)
ATTORNEY FOR APPLICANT(S)